PM_{10} SIP/Maintenance Plan Evaluation Report: PacifiCorp Energy – Gadsby Power Plant

Salt Lake County Nonattainment Area

Utah Division of Air Quality

Major New Source Review Section

October 1, 2015

PM10 SIP/MAINTENANCE PLAN EVALUATION REPORT
PacifiCorp Energy – Gadsby Power Plant

1.0 Introduction

This evaluation report (report) provides Technical Support for Section IX, Part H.1 and Section IX, Part H.2 of the Utah Implementation Plan (SIP); to address the Salt Lake County PM_{10} Nonattainment Area (SLCNA). This document specifically serves as an evaluation of the PacifiCorp Energy operated Gadsby Power Plant.

Note on document identification: The intention of the Utah Division of Air Quality is to develop a Maintenance Plan to address PM_{10}. As part of this effort, SIP Subsections IX.H.1 Emission Limits and Operating Practices – General Requirements, IX.H.2 Source-Specific Particulate Emission Limitations in Salt Lake and Davis Counties and IX.H.3 Source-Specific Particulate Emission Limitations for Utah County will be repealed and replaced. Subsection IX.H.4 will be repealed and replaced with Interim Emission Limits and Operating Practices. This subsection provides interim limits, consistent with the limits codified in the $PM_{2.5}$ SIP, until future controls have been implemented within timeframes identified in Section IX Part H.2.

This evaluation report references the SIP version originally dated June 28, 1991 and made effective by EPA on August 8, 1994. This SIP version is often referred to as the "original SIP." The Utah County portion of the SIP was further updated on June 5, 2002 and made effective by EPA on January 22, 2003. Additional SIP revisions were adopted by the Air Quality Board on July 6, 2005 and became state law on August 1, 2005. However, this version of the SIP was not adopted by EPA and therefore never became federal law. In order to distinguish between the various documents in this report, the following coding scheme will be used:

- Since Sections IX.H.1-4 of the 2005 State-only SIP will be repealed entirely, there is no need to refer to that document version within this report.
- When referencing the original SIP with an effective date of August 8, 1994 the qualifier $^{\{OS\}}$ will follow any citation from that document.
- In reference to the updated Utah County SIP with an effective date of January 22, 2003 the qualifier $^{\{UC\}}$ will follow any citation from that document.
- When referencing any new Maintenance Plan/SIP condition or requirement, the citation will be left blank.

Therefore, a particular sentence of this document might read as follows:

SIP Subsection IX.H.1.c – Stack Testing supersedes 2.a.A$^{\{OS\}}$ from the original SIP.

1.1 Facility Identification

Name: Gadsby Power Plant
Address: 1407 West North Temple (rear), Salt Lake City, Utah,
Salt Lake County
Owner/Operator: PacifiCorp Energy
UTM coordinates: 4,513,486 m Northing, 421,582 m Easting, Zone 12

1.2 Facility Process Summary

The Gadsby Power Plant (Gadsby) is a natural gas-fired electric generating plant consisting of three (3) steam boilers (Units #1, #2 and #3) and three (3) simple-cycle combustion turbines (Units #4, #5 and #6). Unit #1 is a 65 MW unit constructed in 1951, Unit #2 is an 80 MW unit constructed in 1952, and Unit #3 is a 105 MW unit constructed in 1955. Fuel oil may be used in Units #1, #2, and #3 as a back-up fuel during natural gas curtailments. Units #1 and #2 are equipped with low NOx burners. Units #4-6 are 43.5 MW LM6000 natural gas-fueled simple cycle combustion turbine engines that were added in 2002. The plant also has two small black start (emergency) generators (175 kW and 1,007 kW), three cooling towers for the boilers, and several small storage tanks.

1.3 Facility Criteria Air Pollutant Emissions Sources

The source consists of the following emission units:

65 MW natural gas-fired steam boiler (diesel fuel capable) – Unit #1
80 MW natural gas-fired steam boiler (diesel fuel capable) – Unit #2
105 MW natural gas-fired steam boiler (diesel fuel capable) – Unit #3
43.5 MW LM6000 natural gas-fueled simple cycle gas turbine – Unit #4
43.5 MW LM6000 natural gas-fueled simple cycle gas turbine – Unit #5
43.5 MW LM6000 natural gas-fueled simple cycle gas turbine – Unit #6
175 kW diesel generator – Em Gen #1
1,007 kW diesel generator – Em Gen #2
Storage tanks (several tanks ranging in size from 975 gallons to 4,200 gallons)
Cooling Towers #1, #2, #3

1.4 Facility 2011 Baseline Actual Emissions and Current PTE

In 2011, Gadsby's baseline actual emissions were determined to be the following (in tons per year):

Table 1: Actual Emissions

Pollutant	Actual Emissions (Tons/Year)
PM_{10}	12.254
SO_2	0.809
NO_x	71.117

The current PTE values for Gadsby, as established by the most recent AO issued to the source (DAQE-AN103550015-09) are as follows:

Table 2: Current Potential to Emit

Pollutant	Potential to Emit (Tons/Year)
PM_{10}	114.27
SO_2	10.1
NO_x	726.8

However, please see Section 2.0 (and Table 3) below for further details on Gadsby's true PTE

value.

2.0 Modeled Emission Values

Unlike the base year inventory, which used only the 2011 actual emissions for each source to set the baseline for modeling, a modified version of the PTE values was used for the modeled attainment demonstration. Generally speaking, beginning with the PTE values listed in Table 2 (from the most recent approval order issued to each source), these values were "trued-up" by including the expected effects from implementation of RACT from the PM2.5 SIP. This yields a 2019 Projected Emission Value for each of the pollutants of concern. Where necessary, these values were corrected for condensable particulates using simple correction factors based on fuel consumed or process type.

Where gaseous fuels such as natural gas were combusted, filterable-only emissions were converted to a filterable+condensable emission value by multiplying the filterable rate by 4. For natural gas, AP-42 lists the various emission factors as:

Filterable PM: 1.9 lb/106 scf
Condensable PM: 5.7 lb/106 scf
Total PM: 7.6 lb/106 scf

In other words, the total PM is almost exactly four times the filterable emission value. Liquid fuels, such as diesel fuel #2, were also converted using the latest AP-42 emission factors. Processes such as cooling towers, which emit largely filterable-only emissions, were not adjusted. Other processes were adjusted, as needed, on a case-by-case basis using the best data available – primarily the latest stack test information.

For the Gadsby Plant only one of these steps was required. The most recent AO to this source was already adjusted for the effects of condensable PM10. When RACT was imposed as part of the requirements of the PM2.5 SIP, the Gadsby plant was only required to install extended catalyst beds on the SCR units controlling the natural gas-fired turbines. The total expected reduction in NOx emissions is about 10.7 tpy – yielding the following adjusted modeled PTE values (shown in Table 3 below):

Table 3: Modeled Emission Values

Pollutant	Potential to Emit (Tons/Year)
PM_{10}	114.27
SO_2	10.1
NO_x	716.1

Although a specific application of new RACT is not a requirement of the maintenance plan, the limitations found within this maintenance plan are based on the most recent PM2.5 Section of the SIP. This Section of the SIP required the application of RACT above and beyond the existing controls already required of most listed PM10 SIP sources – including the Gadsby power plant. The conditions, requirements and emission limitations contained within this maintenance plan are based on those in Sections IX.H.11-13 – which comprise the PM2.5 sections of the SIP, and include this additional RACT application. All requirements from the original PM10 SIP that have not been superseded or replaced, and which are still necessary, will also be retained. By necessary, meaning: significant from the standpoint of PM10 control, or in demonstrating that no backsliding in the application of RACT has taken place. This is discussed in greater detail in

Item 3 below.

3.0 Comparison of Requirements – Original SIP and New Maintenance Plan

Gadsby is a previously listed SIP source. In the original PM_{10}, Gadsby was listed in Subsection IX.H.2.b.BBB{OS} as Utah Power & Light - Gadsby. As a listed source there were several requirements and conditions that applied to the facility.

In addition, Gadsby is also a listed source in the PM2.5 Section of the SIP (see SIP Section IX.H.12.q). As was discussed above in Item 2.0, all limits in this maintenance plan are based on the limits in the December 3, 2014 PM2.5 SIP; either in the general requirements of subsection IX.H.11 or the source specific requirements of IX.H.12.q. Therefore, a comparison between the original SIP requirements, and those found in this new maintenance plan can be found below:

3.1 Original SIP General Requirements

IX.H.2.a General Requirements{OS}

The original SIP was a divided document, having two separate sets of General Requirements. The requirements found at IX.H.1.a{OS} applied to the listed sources found in Utah County, while those found at IX.H.2.a{OS} applied to the listed sources found in Salt Lake and Davis County. As the Gadsby power plant was (and is) located in Salt Lake County, only the general requirements of IX.H.2.a{OS} applied.

2.a.A. Stack Testing{OS} – this subsection covered the general methods and procedures for conducting stack testing, including the establishment of a pretest protocol, pretest conference, and the use of specific EPA test methods. This subsection has since been updated and superseded by SIP subsection IX.H.1.e which serves the same purpose.

2.a.B. Visible Emissions{OS} – covered the establishment of designated opacity limitations for specified process units and/or process equipment. This subsection has since been superseded by SIP subsection IX.H.1.f which serves the same purpose.

2.a.C. Visible Emissions (cont.){OS} – covered the procedure by which visible emission observations would be conducted. This subsection has since been superseded by SIP subsection IX.H.1.f which incorporates equivalent language.

2.a.D. Annual Emission Limitations{OS} – established that annual emissions would be determined on a rolling 12-month basis, and that a new 12 month emission total would be calculated on the first day of each month using the previous 12 months data. This subsection is no longer needed as the annual PM_{10} standard no longer exists, and no source-specific annual SIP Caps appear in either IX.H.2 or IX.H.3 of the new maintenance plan.

2.a.E. Recordkeeping Requirements{OS} – established that records need to be kept for all periods that the plant is in operation, for a period of at least two years, and provided upon request. This subsection has since been superseded by SIP subsection IX.H.1.c which incorporates equivalent language.

2.a.F. Approval Orders{OS} – established that this subsection of the SIP superseded any previously issued AOs. No longer applicable, as this subsection of the SIP will be superseded, and no previously issued AOs are still in existence.

2.a.G. Proper Maintenance{OS} – established that all facilities need to be adequately and properly maintained. Not needed. This is inherent in the NSR permitting program, under R307-401-4(1).

2.a.H. Future Modifications{OS} – established that future modifications to the approved facilities were also subject to the NSR permitting requirements. Not needed. This is inherent in the NSR permitting program, under R307-401-3(1)(b).

2a.I. Unpaved Operational Areas{OS} – established rules for treating fugitive dust with water sprays or chemical dust suppression. This requirement has been superseded by the fugitive dust rules of R307-205 and R307-1-4.5, or the most recent federally approved fugitive dust rule.

2.a.J. Actual Emissions{OS} – established that the actual emissions included for each listed source in subsection IX.H.2.b would not be used for compliance purposes. This subsection is no longer needed as a listing of individual source actual emissions are no longer included in the requirements of subsections IX.H.1-4 of the SIP. This requirement is outdated and obsolete.

2.a.K. Test if Directed{OS} – established a definition of this term. No longer needed as this term is no longer used and the condition itself no longer applies. UDAQ has a minimum test frequency established under R307-165-2. This same rule also allows for (and requires) any additional testing to demonstrate compliance status as deemed necessary by the Director.

2.a.L. Definitions{OS} – established that the definitions contained in R307 apply to subsection IX.H.2. This subsection has since been superseded by SIP subsection IX.H.1.b which incorporates equivalent language.

2.a.M. Petroleum Refineries{OS} – This is a fairly lengthy subsection pertaining only to the petroleum refineries. This subsection has its own sub-subsections, owing to the overall length and complexity. This subsection has been replaced generally by the new maintenance plan requirements found at IX.H.1.g; however, as this source is not a petroleum refinery, this subsection does not apply.

2.a.N. Specific Fuel Requirements for Coal and/or Oil{OS} – established that specific rules for the sulfur content of these fuels also existed and applied. This subsection has since been superseded by the individual source requirements found in IX.H.2 and IX.H.3 (see specifically the sources Kennecott and BYU). This requirement is now largely irrelevant as few sources have the ability or authority to burn coal, and the rules on the sulfur content of fuel oil have been updated with lower sulfur requirements – specifically the requirements on the sulfur content allowed in diesel fuel found under 40 CFR 80.510(c) for off-highway diesel and 40 CFR 80.520(a) for on-highway diesel. None of the listed sources have the ability to burn any other fuel oils.

3.3 Original SIP Source Specific Requirements

Individual source requirements:

2.b.BBB.1.{OS} This subsection was a listing of the equipment at the power plant – this subsection has been superseded and is irrelevant. A simple listing of equipment does not constitute an emission limitation, does not impose any restriction on daily emissions, and rapidly becomes out of date as well as impossible to enforce. The original listing found in this subsection does not match the current equipment installed and operating at the plant and would represent a significant step backwards in emission control and power generation technology.

2.b.BBB.2.{OS} Emissions limitations on the three boilers. Two different sets of NOx emission limits were established: one set for "winter-time" operation, defined as being from November 1 through the end of February; the second being "summer-time" operation, defined as March 1, through October 31. This condition has been split and moved into three separate subsections of the new maintenance plan – specifically requirements IX.H.2.j.i.A, IX.H.2.j.ii.A, and IX.H.2.j.iii.A. These individual requirements retain the previous NOx limits on each of the three boilers.

2.b.BBB.3.{OS} Stack testing requirements. Established the specific stack testing method and frequency to demonstrate compliance with the emissions listed in the previous condition [2.b.BBB.2.{OS}]. This testing requirement has been superseded by IX.H.2.j.i.B, IX.H.2.j.ii.B, and IX.H.2.j.iii.B in the new maintenance plan which requires the installation and operation of NOx and O2 CEMs.

2.b.BBB.4.{OS} Fuel usage requirement. This condition limited the fuel types available for use in the boilers; requiring natural gas as primary, and #2 fuel oil or better only as a backup fuel. The sulfur content of any fuel oil burned was required to be tested, and fuel oil could only be used for maintenance firings, or during natural gas curtailments. Maintenance firings could only be scheduled between April 1, and November 30. Finally, records of fuel oil usage would be kept.

The three boilers are still dual-fueled; however, many of the specifics from the original SIP have been dropped as they are no longer necessary. The rules on the sulfur content of fuel oil have been updated with lower sulfur requirements – specifically the requirements on the sulfur content allowed in diesel fuel found under 40 CFR 80.510(c) for off-highway diesel and 40 CFR 80.520(a) for on-highway diesel (*see also* Item 2.a.N{OS} above for more details). Therefore only the specific requirement to burn natural gas except during natural gas curtailments has been retained. This requirement is now found at IX.H.2.j.iv.

2.b.BBB.5.{OS} Establishment of annual emissions. This subsection listed the expected values for PM10, NOx and SO2 for the power plant. It also stated that these values superseded the emissions previously credited to the source in an earlier letter dated February 7, 1986. Finally, it stated that these values were only valid if the boilers were capable of operation at the time of SIP approval.

This subsection is no longer valid as none of the original SIP annual values are applicable to the source at this time. The Gadsby Plant has expanded in operation by adding three combustion turbines with associated cooling towers. The original boilers are still in operation, but at reduced firing from full base load capacity.

Table 4 shows a comparison of the original SIP emission values, to the new maintenance plan expected emission rates. While the original SIP established annual values for each of the three pollutants, the new maintenance plan includes only direct short-term emission limits on NOx. Thus, the table includes a calculated 24-hr value of NOx emissions, based on multiplying the short term emission rates by the number of hours of operation (24 hours per day). As there are no short term limits established for PM10 or SO2, estimates of annual emissions are provided merely for comparison with the original SIP values. An estimate of annual NOx emissions is also provided for the same reason. All "new" annual emissions are taken from the latest permit issued to Gadsby. For comparison purposes, the estimate of daily NOx emissions from the original SIP was determined by simply dividing the annual value by 365 days. This provides a value which can be used to compare with the new maintenance plan, but serves no other useful purpose.

Table 4: Comparison Table – Old SIP Emissions vs New Maintenance Plan Emissions

All values in tons	SO_2 Original	SO_2 New	NO_x Original	NO_x New	PM_{10} Original	PM_{10} New
Annual	67.7	10.1	2,983.0	716.1	61.3[$]	114.27[&]
Daily (24-hr)	-	-	8.17[*]	7.3	-	-

[$] filterable emissions only
[&] includes condensable emissions and particulate emissions from three cooling towers
[*] estimate of daily emissions provided for comparison purposes only

4.0 New Maintenance Plan – General Requirements

The general requirements for all listed sources are found in SIP Subsection IX.H.1. These serve as a means of consolidating all commonly used and often repeated requirements into a central location for consistency and ease of reference. As specifically stated in subsection IX.H.1.a below, these general requirements apply to all sources subsequently listed in either IX.H.2 (Salt Lake County) or IX.H.3 (Utah County), and are in addition to (and in most cases supplemental to) any source-specific requirements found within those two subsections.

IX.H.1.a. This paragraph states that the terms and conditions of Subsection IX.H.1 apply to all sources subsequently addressed in the following subsections IX.H.2 and IX.H.3. It also clarifies that should any inconsistency exist between the general requirements and the source specific requirements, then the source specific requirements take precedence.

IX.H.1.b States that the definitions found in State Rule 307-101-2, Definitions, apply to SIP Section IX.H. Since this is stated for the Section (IX.H), it applies equally to IX.H.1, IX.H.2 and IX.H.3.

IX.H.1.c This is a recordkeeping provision. Information used to determine compliance shall be recorded for all periods the source is in operation, maintained for a minimum period of five (5) years, and made available to the Director upon request. As the general recordkeeping requirement of Section IX.H, it will often be referred to and/or discussed as part of the compliance demonstration provisions for other general or source specific conditions.

IX.H.1.d Statement that emission limitations apply at all times that the source or emitting unit is in operation, unless otherwise specified in the source specific conditions listed in IX.H.2 or IX.H.3.

This is the definitive statement that emission limits apply at all times – including periods of startup or shutdown. It may be that specific sources have separate defined limits that apply during alternate operating periods (such as during startup or shutdown), and these limits will be defined in the source specific conditions of either IX.H.2 or IX.H.3.

Conditions 1.a, 1.b and 1.d are declaratory statements, and have little in the way of compliance provisions. Rather, they define the framework of the other SIP conditions. As condition 1.c is

the primary recordkeeping requirement, it shall be further discussed under item 4.2 below.

IX.H.1.e This is the main stack testing condition, and outlines the specific requirements for demonstrating compliance through stack testing. Several subsections detailing Sample Location, Volumetric Flow Rate, Calculation Methodologies and Stack Test Protocols are all included – as well as those which list the specific accepted test methods for each emitted pollutant species (PM_{10}, NO_x, or SO_2). Finally, this subsection also discusses the need to test at an acceptable production rate, and that production is limited to a set ratio of the tested rate.

These stack testing requirements supersede those found in IX.H.1.a.$A^{\{OS\}}$ and IX.H.2.a.$A^{\{OS\}}$ of the original SIP.

IX.H.1.f This condition covers the use of CEMs and opacity monitoring. While it specifically details the rules governing the use of continuous monitors (both emission monitors and opacity monitors), it also covers visible opacity observations through the use of EPA reference method 9.

These requirements specifically supersede those found in IX.H.1.a.$C^{\{OS\}}$ and IX.H.2.a.$C^{\{OS\}}$ of the original SIP. The original SIP requirements of IX.H.1.a.$B^{\{OS\}}$ and IX.H.2.a.$B^{\{OS\}}$, both of which addressed individual equipment opacity, will be superseded as necessary by the particular source specific limitations found in IX.H.2 or IX.H.3.

Both conditions 1.e and 1.f serve as the mechanism through which sources conduct monitoring for the verification of compliance with a particular emission limitation. All conditions in these subsections are strictly in accordance with EPA approved methods and guidelines.

4.1 Monitoring, Recordkeeping and Reporting

As stated above, the general requirements IX.H.1.a through IX.H.1.f primarily serve as declaratory or clarifying conditions, and do not impose compliance provisions themselves. Rather, they outline the scope of the conditions which follow in the source specific requirements of IX.H.2 and IX.H.3.

For example, most of the conditions in those subsections include some form of short-term emission limit. This limitation also includes a compliance demonstration methodology – stack test, CEM, visible opacity reading, etc. In order to ensure consistency in compliance demonstrations and avoid unnecessary repetition, all common monitoring language has been consolidated under IX.H.1.e and IX.H.1.f. Similarly, all common recordkeeping and reporting provisions have been consolidated under IX.H.1.c.

4.2 Discussion of Attainment Demonstration

As is discussed above in Items 4.0 and 4.1, these are general conditions and have few if any specific limitations and requirements. Their inclusion here serves three purposes. 1. They act as a framework upon which the other requirements can build. 2. They demonstrate a prevention of backsliding. By establishing the same or functionally equivalent general requirements as were included in the original SIP, this demonstrates both that the original requirements have been considered, and either retained or updated/replaced as required. 3. When a general requirement has been removed, careful consideration was given as to its specific need, and whether its retention would in any way aid in the demonstration of attainment with the 24-hr standard. If no

argument can be made in that regard, the requirement was simply removed.

5.0 New Maintenance Plan – Gadsby Specific Requirements

The Gadsby specific conditions in Section IX.H.2 address those limitations and requirements that apply only to the Gadsby Power Plant in particular.

IX.H.2.j.i This condition lists the specific requirements applicable to Steam Generating Unit #1 (Boiler #1).

Subparagraph A: NOx limit of 179 lbs/hr.
Subparagraph B: requirement to install and operate a NOx and CO2 CEM to demonstrate compliance with the emission limit in IX.H.2.j.i.A.

IX.H.2.j.ii This condition lists the specific requirements applicable to Steam Generating Unit #2 (Boiler #2).

Subparagraph A: NOx limit of 204 lbs/hr.
Subparagraph B: requirement to install and operate a NOx and CO2 CEM to demonstrate compliance with the emission limit in IX.H.2.j.ii.A.

IX.H.2.j.iii This condition lists the specific requirements applicable to Steam Generating Unit #3 (Boiler #3).

Subparagraph A.1: NOx limit of 142 lbs/hr, applicable between November 1 and February 28/29
Subparagraph A.2: NOx limit of 203 lbs/hr, applicable between March 1 and October 31
Subparagraph B: requirement to install and operate a NOx and CO2 CEM to demonstrate compliance with the emission limit in IX.H.2.j.iii.A.

IX.H.2.j.iv This condition lists the fuel requirement applicable to all three boilers.

Subparagraph A: The owner/operator shall use only natural gas as a primary fuel and No. 2 fuel oil or better as back-up fuel in the boilers. The No. 2 fuel oil may be used only during periods of natural gas curtailment and for maintenance firings. Maintenance firings shall not exceed one-percent of the annual plant Btu requirement. In addition, maintenance firings shall be scheduled between April 1 and November 30 of any calendar year. Records of fuel oil use shall be kept and they shall show the date the fuel oil was fired, the duration in hours the fuel oil was fired, the amount of fuel oil consumed during each curtailment, and the reason for each firing.

IX.H.2.j.v This condition lists the requirements applicable to all three combustion turbines.

Subparagraph A: Total emissions of NOx from all three turbines shall be no greater than 600 lbs/day. For purposes of this subsection a "day" is defined as a period of 24-hours commencing at midnight and ending at the following midnight.
Subparagraph B: requirement to install and operate a NOx and O2 CEM to demonstrate compliance with the emission limit in IX.H.2.j.v.A.

IX.H.2.j.v This condition lists the startup/shutdown emission minimization plan requirements applicable to all three combustion turbines. The requirement also includes a definition of startup, shutdown, and a limit on total hours of operation (2) in startup or shutdown mode, per turbine, per day. This condition also

includes the requirement to monitor power output as a measurement of turbine load (required under subparagraphs B and C of the condition) through installation of a power meter.

5.1 Monitoring, Recordkeeping and Reporting

Monitoring for IX.H.2.j.i.A is specifically outlined in IX.H.2.j.i.B; IX.H.2.j.ii.A is addressed in IX.H.2.j.ii.B; etc. All NOx monitoring is covered by CEM. CEM monitoring requirements are found in IX.H.1.f. Recordkeeping is subject to the requirements of IX.H.1.c.

5.2 Discussion of Attainment Demonstration

Both in the original SIP and in the new maintenance plan, Gadsby was primarily a source of NOx emissions. While some direct PM10 and SO2 emissions added to the overall contribution from Gadsby, it remains a listed source because of NOx. Total emissions of NOx have dropped from 2,983 tons per year in the original SIP to an estimated 716.1 tons in the new maintenance plan. While direct PM10 emissions have increased slightly, this is due primarily to the contribution of condensable particulates, which were not included in the original SIP. Some direct PM10 is also provided from the new cooling towers. Emissions of SO2 have remained roughly equal.

6.0 Implementation Schedule

For the most part, the requirements imposed on the Gadsby Power Plant are effective immediately. While some provision was made for sources generally to implement the RACT requirements of the PM2.5 SIP (and which were included as part of the modeled emission values for each source as discussed in that section above), the Gadsby plant has already completed all required RACT modifications. The emission limits listed in IX.H.2.j can be applied immediately. Similarly, the provisions of IX.H.1.a-f (the General Requirements) can also be applied immediately.

7.0 References

Evaluation Report – Gadsby Power Plant

UTAH PM_{10} SIP/MAINTENANCE PLAN

Salt Lake County Nonattainment Area

Supporting Information